				1. CONTRACT ID CODE	PAGE OF PAGES			
MENDMENT OF SOLICITAL AMENDMENT/MODIFICATION NO.	ATIONIN	3. EFFECTIVE DATE		TION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)			
AWENDMENT/MODIFICATION NO.	1	See Block 16C	#. REGUISI	HONE UNDERSE REG. NO.	e. Thoseof No. (in applicable)			
6. ISSUED BY	CODE		7. ADMINIS	TERED BY (If other than Item 6)	CODE			
John F. Kennedy Space (	Center. N	ASA	7		<del></del>			
Procurement Office - OD	N – OP-	MS						
Kennedy Space Center, F			1					
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B. NAME AND ADDRESS OF CONTRAC	street, county, State, and Zip Co	nde) (X) 9A. AMENDMENT OF SOLICITATION NO.						
			į.	9B. DATED (SEE ITEM 11)				
OAO Corporation				10A. MODIFICATION OF CONTRACT/ORDER NO.				
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7500 Greenway Center Dr Greenbelt MD 20770	ive		1	TOAL MODIFICATION OF CONTINUOUS INC.				
Greenbert MD 20770			1	NAS5-98144/0	<b>~</b> 00303₽			
				NAPI OE-COM	,C30303D			
			1	10B. DATED (SEE ITEM 13)				
CODE	FACILIT	Y CODE		December 1, 200	1-i			
. THIS ITEM ONLY APPLIES TO AMEN	i i			December 1, 200	11			
The above numbered solicitation is an	- se habban	et forth in Item 14. The hour ar	d date specified	for receipt of Offere [ ] is av	rended. is not extended.			
THIS ITEM APPLIES ONLY TO MODIFI A. THIS CHANGE ORDER IS ISS NO. IN ITEM 10A.								
B. THE ABOVE NUMBERED CON appropriation date, etc.) SET FORT	HIN ITEM	4, PURSUANT TO THE AUTH	IORITY OF FAR	43.103(b).	hanges in paying office,			
C. THIS SUPPLEMENTAL AGREE NASS-98144 Contrac Terms and Condition	t Clause	C.7 Technology Ref	reshment l	F: Process and FAR Clau	se 52.212-4 Contract			
D. OTHER (Specify type of modific	ation and au	thority)						
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	r V 1			<del></del>				
MPORTANT: Contractor [ ] is no								
DESCRIPTION OF AMENDMENT/MODII	•	· · · · · · · · · · · · · · · · · · ·	•	plicitation/contract subject matter i	Minere leasible.)			
ennis Space Center	r	ODIN SERVIC	たう					
chnology Infrastructure: SWR	BB53 3	010 00 Rev 2 and BE	153 3010 01	Hev 1				
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ange in Delivery Order Price:	\$34,998	7.00 (INCREASE)						
ot as provided herein, all terms and condit	lions of the d	ocument referenced in Item 9A	or 10A, as heref	ofore changed, remains unchange	ed and in full force and effect.			
NAME AND TITLE OF SIGNER (Type or			A. NAME AND	TITLE OF CONTRACTING OFFIC				
Lisa A. Nicholson				Penelope A. Ebright				
Contracts Manager		•	Contractin	g Officer				
CONTRACTOR OFFEROR	<del></del>	15C. DATE SIGNED 16	B. UNITED STA	TES OF AMERICA	16C. DATE SIGNED			
7177				1 1 61	1			
->//		10-28-02 BY	<del>+</del>	Ape W. Cliric	WI 10/28/12			
(Signature of person authorized to sign 540-01-152-8070	<u>v</u>	30-105	(Signat	ure of Contracting Officer) //	FORM 30 (Rev. 10-83)			
IOUS EDITION UNUSABLE		20-100		Prescribed by G	isa ´			
				FAR (48 CFR) 5	33,243			

1. In accordance with Master Contract NAS5-98144, C.7, Technology Refreshment Process, the technology refreshment services referenced below is hereby incorporated into this Delivery Order at a fixed price of \$34,987.00.

SWR # Subject		Amount
BB53 3010 00 Rev 2	Cable Plant Expansion in B1100 for EPA/GMPO	\$23,574.54
BB53 3010 01 Rev 1	Cable Plant expansion from B1105 to B1106 for EPA/GMPO	\$11,412.46
	TOTAL	\$34,987.00

## 2. SWR BB53 3010 00 Rev 2

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling and equipment installation) and materials necessary to install (2) Cat5 wires to 43 locations back to new communications room 230 in B1100 for EPA/GMPO as identified in OAO proposal dated October 25, 2002.

- a. The contractor shall perform the following tasks:
  - 1) Install (2) Cat5e wires to (43) locations on the 2<sup>nd</sup> floor of B1100.
  - 2) Install (1) 6-strand singlemode fiber cable from room 230 to room 241.
  - 3) Install (1) 19" x 7' equipment rack in room 230.
  - 4) Install (2) vertical wire troughs on 19" x 7' equipment rack in room 230.
  - 5) Install (1) ¾" x 4' x 8' sheet of plywood in room 230 for wiring blocks and fiber panel.
  - 6) Install (2) fiber LIU's e/w 10A panels and singlemode couplers in room 230 and (2) fiber LIU's e/w 10A panels and singlemode couplers in room 241 to be used for fiber cable.
  - 7) Install (2) 48-port T568B Cat5e patch panels on 19" x 7' equipment rack in room 230
  - 8) Install (4) patch cord organizers on 19" x 7' equipment rack.
  - 9) Terminate (86) Cat5e station wires on the (2) 48-port patch panels that were installed on the 19" x 7' equipment rack.
  - 10) Terminate 6-strand singlemode fiber cable into ST connectors in room 230 and room 241 and place in LIU's that were installed above.
  - 11) Terminate (86) Cat5e station wires on (86) Cat5e T568B jacks.
  - 12) Install (1) caddy clip at (38) locations to mount faceplate e/w jacks and (5) for wiring to come into (5) cubicles.
  - 13) Install (1) Panduit outlet box in (5) cubicles to mount faceplate and jacks.
  - 14) Install (43) faceplates e/w with Cat5e jacks.
  - 15) Install (1) T1A circuit card in UMC chassis at B1103 to extend T1 over copper cable to B1106.
  - 16) Test and label all jacks.
  - 17) Redline drawings with jack numbers for OAO draftsman so that he can update drawings.

- b. The contractor shall provide the following material:
  - 1) 14,000 feet of Cat5e plenum wire (CMP-00424MAX-6U-05) yellow
  - 2) 200 feet of 6-strand singlemode fiber cable (370-948-SMODE-06)
  - 3) 86 each Avaya MPS100E-123 Cat5e jack (221195)
  - 4) 76 each Avaya 14 feet patch cord (MM14-LU7E-05) yellow
  - 5) 50 each Velcro ties
  - 6) 43 each caddy clips
  - 7) 43 each Avaya M14L-262 faceplate (197613)
  - 8) 43 each Avaya 5-feet patch cord (MM05-LU7E-05) yellow
  - 9) 43 each Avaya 4-feet patch cord (MM04-LU7E-05) yellow
  - 10) 12 each P3020A-Z-125 singlemode ST connectors (157475)
  - 11) 12 each cool cure consumables (142172)
  - 12) 12 each C3000A-2 singlemode ST couplers (105263)
  - 13) 10 each Avaya 25-feet station cord (MM25-LU7e-05) yellow
  - 14) 9 each asbestos disposable suits
  - 15) 6 each asbestos filter cartridges
  - 16) 5 each Panduit deep outlet boxes (205872)
  - 17) 4 each Avaya patch cord organizer (155563)
  - 18) 4 each Avaya 100A3 LIU (146050)
  - 19) 4 each 5-meter ST/SC singlemode fiber jumper (152039)
  - 20) 4 each 10A panel for 100A3 fiber LIU (088980)
  - 21) 2 each double sided vertical trough (166031)
  - 22) 2 each Avaya 48-port patch panels (529479)
  - 23) 2 each 3-meter ST/ST fiber jumpers (151988)
  - 24) 2 each 3-meter ST/SC fiber jumpers (152038)
  - 25) 1 sheet of 3/4" x 4' x 8' plywood
  - 26) 1 each 19" x 84" aluminum equipment rack
  - 27) 1 each 1-meter ST/ST fiber jumper (151986)
  - 28) 1 pack of M20A dust cover (146674)
  - 29) 1 each T1A circuit card for UMC (0110-0192)
- c. Schedule: The completion of this effort shall be (2) two weeks after the receipt of a signed Modification.

## 3. SWR BB53 3010 01 Rev 1

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling and equipment installation) and materials necessary to install (1) 12MM/12SM fiber cable from room C-311 in B1105 to room 104 in B1106 and install (1) 6-strand singlemode fiber cable from room C-311 in B1105 from room E-510 in B1105 for EPA/GMPO as identified in OAO proposal dated October 23, 2002.

- a. The contractor shall perform the following tasks:
  - 1) Trench between B1105 and B1106 and place 2" PVC conduit.
  - 2) Place 2" rigid conduit up the outside wall of B1105 and B1106.
  - 3) Drill 2" hole in wall of B1105 and B1106 and place rigid conduit thru wall.
  - 4) Place electrical LB on the top of the rigid conduit at B1105 and B1106.

- 5) Cover trench and mound up dirt to keep rain from washing away.
- 6) Install (1) 12-multimode/12-singlemode-fiber cable from room C-311 in B1105 out to room 104 in B1106.
- 7) Install (1) 6-strand singlemode fiber cable from room C-311 in B1105 to room E-510 in B1105.
- 8) Install (2) 200A fiber LIU's e/w (4) 10A panels and (12) C-2000A & (12) C-3000A-2 ST couplers in room C-311 in B1105 and room 104 in B1106.
- 9) Install (2) 100A fiber LIU's e/w (1) 10A panel and (6) C-3000A-2 ST couplers in room C-311 in B1105 and (6) C-3000A-2 ST couplers in existing fiber panel in room E-510.
- 10) Terminate all fiber strands in ST connectors and place in LIU's installed above in both buildings.
- 11) Test and label fiber cables at both ends.
- 12) Redline drawings with route and give to OAO draftsman to update drawings.
- b. The contractor shall provide the following material:
  - 1) 600 feet of 12MM/12SM fiber cable (370-947-HYBRID-12/12)
  - 2) 400 feet of 6SM fiber cable (370-947-SMODE-06)
  - 3) 60 each cool cure consumables (142172)
  - 4) 36 each P3020A-Z-125 singlemode ST connectors (157475)
  - 5) 36 each C3000A-2 singlemode ST couplers (105263)
  - 6) 30 feet of 2" schedule 80 PVC conduit
  - 7) 24 each P2000C-C-125 multimode ST connector (118974)
  - 8) 24 each C2000A multimode ST coupler (088987)
  - 9) 20 feet 2" rigid conduit
  - 10) 10 each 10A panels for LIU's (088980)
  - 11) 4 each Avaya 200A LIU (128826)
  - 12) 3 each 2" PVC couplers
  - 13) 2 each Avaya 100A3 LIU (146050)
  - 14) 2 each 2" Schedule 80 PVC 90
  - 15) 2 each 2" PVC female adapter
  - 16) 2 each 2" electrical LB
  - 17) 1 each 1-meter singlemode fiber jumper ST/SC (152036)
  - 18) 1 each 3-meter singlemode fiber jumper ST/SC (152038)
  - 19) 1 each 1-meter singlemode fiber jumper ST/ST (151986)
- c. Schedule: The completion of this effort shall be (2) two weeks after the receipt of a signed Modification.

3. Part II "Contract Administration Data", Item 4, is revised as indicated below to incorporate the increase of \$34,987.00 for these infrastructure upgrades:

## 4. TOTAL DELIVERY ORDER VALUE (through Mod No. 64)

Ordered Seats and Services	\$	4,003,454.92
Catalog Actuals	\$	245,587.54
Specialized Services Actuals	\$	3,450.00
Infrastructure upgrades	\$	1,204,933.74
Subtotal	\$	5,457,426.20
Less credits	\$	(2,173.00)
Less retainage not earned	\$	(52,225.79)
Subtotal	\$	5,403,027.41
Seats/service levels projected through 11/30/04		11,769,042.98
Total Estimated Delivery Order Value	\$	17,172,070.39

4. Part V "Technology Infusion (Infrastructure Upgrades)", Item 2 is modified to include the subject infrastructure upgrades. The signed date and completion date will be completed in a future infrastructure upgrade modification.

Mod. No.	Description of Work	Date Signed	Completion Date	Modification Value
64	BB53 3010 00 Rev 2 Cable Plant expansion in			\$ 23,574.54
	B1100 for EPA/GMPO			
64	BB53 3010 01 Rev 1 Cable Plant expansion from			11,412.46
	B1105 to B1106 for EPA/GMPO			

- 5. Payment Schedule: Invoicing and Payment for this modification will be made in accordance with Master Contract NAS5-98144, FAR 52.212-4: Commercial Items (May 1997) (Modified).
- 6. Reporting requirements: The contractor shall provide monthly status reports to the SSC Alternate DOCOTR, with a copy to the DOCO. These reports shall include, as a minimum, installation progress, and potential problem areas.
- 7. In consideration of the modification agreed to herein as complete equitable adjustment for the changes set forth, the Contractor hereby releases the Government from any and all liability under this delivery order for further equitable adjustments attributable to such facts or circumstances giving rise to these changes.
- 8. All other terms and conditions of this Delivery Order remain unchanged and in full force and effect.